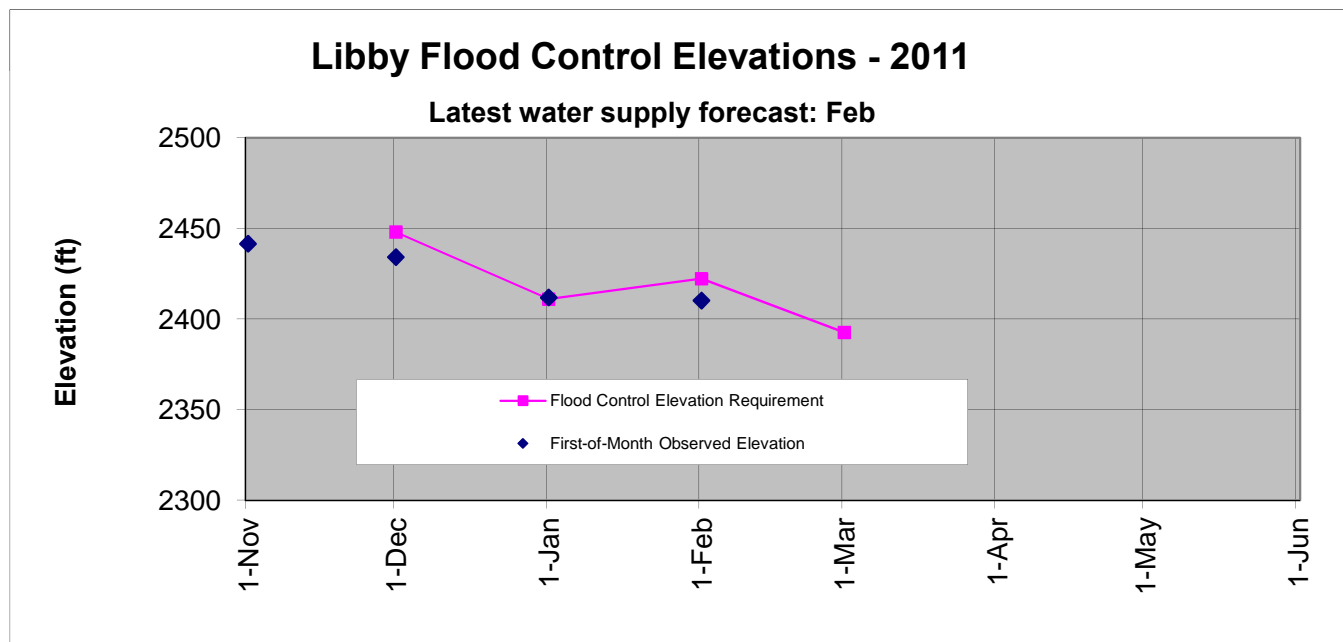
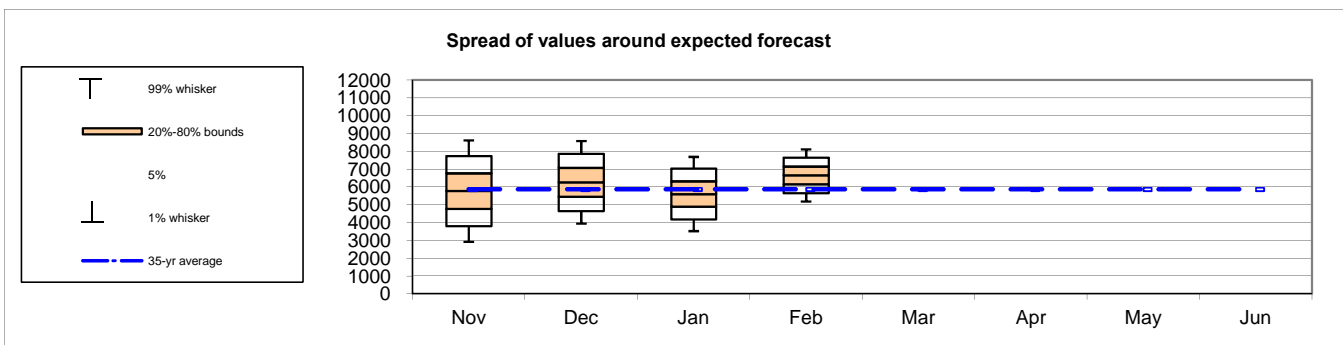


Libby : February Runoff Forecast & Flood Control Calculation

WY 2011

Runoff Forecast and Flood Control				1975-2009 Average	Percent of Average	1929-1999 Average	Percent of Average	
Most Probable Runoff Volume:	Apr-Aug	6656	KAF	5865	113%	6337	105%	
	Apr-Jul	6018	KAF	5303	113%	5771	105%	
	May-Jul	5444	KAF	4797	113%	5247	105%	
28/29 Feb Flood Control Space		2612	KAF					
28/29 Feb Flood Control Elevation		2392.7	ft					
Seasonal Flood Control VARQ Flood Control Implemented								
Forecast Date >>	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Aug Runoff Forecast	5775	6262	5610	6656				
First-of-Month Elev	2441.5	2434.2	2411.9	2410.2				
Date >>	30-Nov	31-Dec	31-Jan	28-Feb	15-Mar	31-Mar	15-Apr	30-Apr
Flood Control Space	500	2000	1488	2612				
Flood Control Elevation	2448.0	2411.0	2422.3	2392.7				



Notes:

1. The given forecast is the official Corps of Engineers forecast for Libby. If you have any questions please contact Joel Fenolio (206 764-6683), Kristian Mickelson (206)-764-6927 or Amy Reese (206) 764-3595.
2. Subsequent forecasts may differ from the originally published forecast due to updated values for precipitation, snow or streamflow.

Libby : February Runoff Forecast & Flood Control Calculation

Apr-Aug Runoff Forecast Calculation:						
Variable	Month(s)	Units	Observed Value	Percent of Average	Regression Coefficient	Marginal Runoff (KAF)
			A		B	=A*B
QBO	∑Jan:Mar		-52.68		-7.2	380.1
Eureka, MT	∑Oct:Jan Prcp	inches	4.60	105%	61.5	282.9
Libby 1 NE RS, MT	∑Oct:Jan Prcp	inches	8.84	112%	51.9	459.0
West Glacier, MT	∑Oct:Jan Prcp	inches	16.86	135%	30.3	510.4
Fernie, BC	∑Oct:Jan Prcp	inches	22.18	100%	13.1	291.1
Floe Lake, BC	1-Feb SWE	inches	18.03	92%	11.7	211.5
Sunshine Village, AB	1-Feb SWE	inches	13.17	85%	21.8	287.7
East Creek, BC	1-Feb SWE	inches	22.60	92%	8.1	182.4
Stahl Peak, MT	1-Feb SWE	inches	30.30	126%	19.4	586.9
Gardiner Creek, AB	1-Feb SWE	inches	20.50	137%	17.7	362.0
Three Isle Lake, AB	1-Feb SWE	inches	11.87	92%	28.8	341.3
Lost Creek South, AB	1-Feb SWE	inches	13.44	84%	18.554	249.4
Morrissey Ridge, BC	1-Feb SWE	inches	20.51	112%	23.377	479.5
Hawkins Lake, MT	1-Feb SWE	inches	17.40	106%	32.1	558.9
Intercept			1		1473.1	1473.1
1-Feb Forecast (KAF)					∑	6656.2

Data used in Libby Water Supply Forecast

	WY 2011									
Climate Data	Jan-10	Feb-10	Mar-10	Jun-10	Jul-10	Oct-10	Nov-10	Dec-10	Jan-11	
SOI				0.10	2.00					
QBO	-16.02	-16.98	-19.68							
PNA						1.80	-0.84			
Precipitation Data	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Units	
Eureka, MT	0.52	2.11	0.84	1.13					inch	
Libby 1 NE RS, MT	1.27	2.65	2.71	2.21					inch	
West Glacier, MT	2.36	3.65	4.53	6.32					inch	
Fernie, BC	73.50	174.70	97.89	217.30					mm	
Snow Water Equiv				1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun	Units
Floe Lake, BC				251	458					mm
Sunshine Village, AB				167	335					mm
East Creek, BC				296	574					mm
Stahl Peak, MT				20	30					inch
Gardiner Creek, AB				334	521					mm
Three Isle Lake, AB				165	301					mm
Lost Creek South, AB				162	341					mm
Morrissey Ridge, BC				233	521					mm
Hawkins Lake, MT				11	17					inch
Streamflow				Jan	Feb	Mar	Apr	May	Jun	Units
Libby Inflow Volume				217.0						KAF
Reservoir Elevation	1-Nov	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun	Units	
Libby FOM Elev	2441.5	2434.2	2411.9	2410.2					feet	